

ACTUATOR 08

**11th International Conference on New Actuators
&
5th International Exhibition on Smart Actuators
and Drive Systems**

**9 – 11 June 2008
Bremen, Germany**

Conference Proceedings

Editor

Hubert Borgmann

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9 – 11 June 2008
Bremen Exhibition and Congress Center
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HVG Hanseatische Veranstaltungs-GmbH
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Welcoming Remarks

Welcome to ACTUATOR 2008 in Bremen. This event is the 11th in a series of biennial events in Bremen and consists of the 11th International Conference on New Actuators and the 5th International Exhibition on Smart Actuators and Drive Systems.

For 20 years now, ACTUATOR has been the major meeting place for leading experts, scientists and managers from all over the world in the field of new actuators. And it is still expanding:

When starting in 1988 ACTUATOR offered a new single track forum to a couple of non-conventional actuator technologies, most of them being far away from any commercial application at that time. In 2000 we had to set-up a second track of oral contributions, because of the significant number of abstracts received in response to the call for papers and the limited number of oral slots. In 2006, after three events with an increase of abstracts of about 20 percent each, we faced the same conflict on a higher level: Highranking contributors cancelled their presentation, because there was no chance to get a lecture, although we traditionally publish "poster" manuscripts in the same extent as "oral" ones.

Finally, during the 2006 event we decided to introduce a third track of oral contributions in 2008. Thus, in total 250 conference contributions, 115 oral presentations and 135 posters, will be portraying the state of the art and indicating future trends.

Oral sessions are held in the following fields:

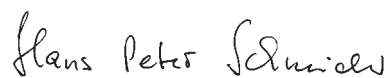
Active vibration control / Active noise control	Microactuators
Actuator control	Microfluidics
Aerospace applications	Nanopositioning / Nanomanipulation
ERF / MRF actuators	Piezoelectric actuators
Haptic applications	Piezoelectric actuators: Applications
Low-power electromagnetic actuators	Piezomotors
Magnetostrictive / Magnetic shape memory actuators	Pneumatics
Medical applications	Polymer actuators
Micro robotics	Shape memory actuators

Again, new promising sessions will be on the start, e. g. "Actuator control", "Pneumatics" and "Haptic applications". Although a 2008 conference participant has the chance to listen to only 49 well selected oral contributions and a few numbers of posters, the knowledge presented in all other contributions is not lost. According to a good tradition we have again compiled the full manuscripts of nearly all oral papers and poster contributions in these proceedings and in a separate CD-ROM. We appreciate the additional trouble the authors went to when preparing their manuscripts in time.

In addition, we thank all the members of the Programme Committee for their excellent work and valuable assistance, and we are particularly grateful to the endorsing institutions and to all others who have supported our public relations work. Our special thanks go to all those participants who are actively contributing to this event by sharing the results of their research work here as authors of papers and posters, or as exhibitors and thus possibly igniting new projects, initiating new co-operations, or paving the way for new business connections.

As every time we look forward to interesting presentations, lively discussions and helpful new contacts, and we would be delighted to welcome you to Bremen again in two years for ACTUATOR 2010.

Enjoy your conference!



Hans Peter Schneider
Messe Bremen
General Manager



Hubert Borgmann
Messe Bremen
Organiser ACTUATOR 2008

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